

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 April 2005 (07.04.2005)

PCT

(10) International Publication Number
WO 2005/030947 A2

- (51) International Patent Classification⁷: C12N 9/10
- (21) International Application Number: PCT/EP2004/052353
- (22) International Filing Date: 29 September 2004 (29.09.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/506,775 30 September 2003 (30.09.2003) US
- (71) Applicant (for all designated States except US): EVOTEC NEUROSCIENCES GMBH [DE/DE]; Schnackenburgallee 114, 22525 Hamburg (DE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): VON DER KAMMER, Heinz [DE/DE]; Verbindungsstr. 6d, 22607 Hamburg (DE). POHLNER, JOHANNES [DE/DE]; Quittenweg 11, 22175 Hamburg (DE).
- (74) Agents: MEYERS, Hans-Wilhelm et al.; P.O. Box 10 22 41, 50462 Cologne (DE).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DIAGNOSTIC AND THERAPEUTIC USE OF A SULFOTRANSFERASE FOR NEURODEGENERATIVE DISEASES

(57) Abstract: The present invention discloses the differential expression of a cytosolic sulfotransferase in specific brain regions of Alzheimer's disease patients. Based on this finding, this invention provides a method for diagnosing or prognosticating a neurodegenerative disease, in particular Alzheimer's disease, in a subject, or for determining whether a subject is at increased risk of developing such a disease. Furthermore, this invention provides therapeutic and prophylactic methods for treating or preventing Alzheimer's disease and related neurodegenerative disorders using a gene coding for SULT4A1. A method of screening for modulating agents of neurodegenerative diseases and recombinant animal models are also, disclosed.

WO 2005/030947 A2